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Job No.: CTCE/BBMP/WNo.17/MK/SDBC/Shape_T/2014-15 03.05.2014

DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Client	**Asst. Executive Engineer,** Yeshwanthapura Sub Division, BBMP, Bangalore.
Agency	**Mr. M. Krishnamurthy,** Contractor, Bangalore.
Name of Work	Providing and laying HDPE Water line in Ganesha Temple Block - IV in JP Park, Ward No. 17, BBMP, Bangalore.
Reference	EE/RRND/Wo. No./221/2013-14 Dated: 05.02.2014
Technical Reference	IS 2386(Part 1) 1963 (RA 2007)
Type of Mix	Semi Dense Bituminous Concrete
Date of Testing	03.05.2014

Result : Flakiness Index = **11.54%**

Elongation Index = **13.29%**

Result : Combined Flakiness & Elongation index **24.83%**

Comments:

→ Maximum allowable Flakiness & Elongation Index for Semi Dense Bituminous Concrete is 30%

Note:

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2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

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Job No.: CCTCE/BBMP/WNo.17/MK/SDBC/Stripping/2014-15 05.05.2014

Stripping Value of Road Aggregates (Static Immersion Test)

IS: 6241

Client	**Asst. Executive Engineer,** Yeshwanthapura Sub Division, BBMP, Bangalore.
Agency	**Mr. M. Krishnamurthy,** Contractor, Bangalore.
Name of the work	Providing and laying HDPE Water line in Ganesha Temple Block - IV in JP Park, Ward No. 17, BBMP, Bangalore.
Reference	EE/RRND/Wo. No./221/2013-14 Dated: 05.02.2014
Type of Mix	Semi Dense Bituminous Concrete
Date of Testing	05.05.2014

Type of binder : 60/70
Percentage of binder used : 5.0% by wt.
Total weight of aggregate : 200 g
Total weight of binder : 10.0 g
Temperature of water-bath : 40° C

Observation Number	Stripping, Percentage	Average, Percentage	Average Retained Coating, %
1	2.6	2.80	97.20
2	2.8		
3	3.0		

Comments:

→ Minimum allowable Aggregate retained coating for Semi Dense Bituminous Concrete is 95%

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Job No.: CTCE/BBMP/WNo.17/MK/SDBC/Sp_Wa/2014-15 05.05.2014

Specific Gravity And Water Absorption Test

IS: 2386 Part III

Client	**Asst. Executive Engineer,** Yeshwanthapura Sub Division, BBMP, Bangalore.
Agency	**Mr. M. Krishnamurthy,** Contractor, Bangalore.
Name of the Work	Providing and laying HDPE Water line in Ganesha Temple Block - IV in JP Park, Ward No. 17, BBMP, Bangalore.
Reference	EE/RRND/Wo. No./221/2013-14 Dated: 05.02.2014
Type of Mix	Semi Dense Bituminous Concrete
Source / Location	Hotmix Plant, Bangalore
Date of Testing	05.05.2014

Sl. No.	Details	Notation	Test Number			Mean Value
			Test 1	Test 2	Test 3	
1	Weight of aggregate suspended in water with the basket	W_1 g	2025	2027	2030	
2	Weight of basket suspended in water	W_2 g	750	750	750	
3	Weight of saturated aggregate in water	$(W_1 - W_2) = W_s$ g	1275	1277	1280	
4	Weight of saturated surface dry aggregate in air	W_3 g	2032	2045	2048	
5	Weight of water equal to the volume of the aggregate	$(W_3 - W_S)$ g	757	768	768	
6	Weight of oven dried aggregate	W_4 g	2020	2029	2034	
7	Specific Gravity	$W_4/(W_3-W_S)$	2.668	2.642	2.648	2.653
8	Apparent Specific gravity	$W_4/(W_4-W_S)$	2.711	2.698	2.698	2.702
9	Water Absorption	$((W_3-W_4)*100)/W_4$	0.59%	0.79%	0.69%	0.69%

Comments:

→ Maximum allowable Aggregate Water absorption value for Semi Dense Bituminous Concrete is 2

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Job No.: CTCE/BBMP/WNo.17/MK/SDBC/Bitumen/2014-15 05.05.2014

BITUMEN DETERMINATION OF SEMI DENSE BITUMINOUS CONCRETE MIX

AS per IRC : SP : 11 - 1984

CLIENT	**Asst. Executive Engineer,** Yeshwanthapura Sub Division, BBMP, Bangalore.
AGENCY	**Mr. M. Krishnamurthy,** Contractor, Bangalore.
NAME OF THE WORK	Providing and laying HDPE Water line in Ganesha Temple Block - IV in JP Park, Ward No. 17, BBMP, Bangalore.
REFERENCE	EE/RRND/Wo. No./221/2013-14 Dated: 05.02.2014
SAMPLE I/D	HDPE Water line in Ganesha Temple Block - IV in JP Park, Ward No. 17
DATE OF TESTING	05.05.2014

BITUMEN CONTENT DETERMINATION

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	474	475
3. Weight of Asphalt and Mineral matter Extracted, g	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	26	25.00
7. Bitumen content in %	5.20	5.00
8. Average	**5.10**	

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